<u>Underlined</u> = deleted in targeting construct

Bold = sequence flanking Neo insert in targeting construct

ACTGTCTGGAACTGGACTGAGTCACCAAAAGGCGAATGGCTTCATCTTATAAAATGTCTG
AACAAAGCACAACTTCTGAGCACATTTTACAGAAGACATGTGATCACCTGATCCTGACTA
ACCGTTCTG<u>GATTAGAGACAGACTCAGTAGCAGAGGAAATGAAGCAGACTGTGGAGGGAC</u>
<u>AGGGGCATACAGTGCACTGGGCAGCTCTCCTGATACTCGCGGTGATAATACCCACCATTG</u>
<u>GTGGGAACATCCTTGTGATTCTGGCTGTTGCACTGGAGAAAAGGCTGCAGTACGCTACCA</u>
<u>ACTACTTTTTAATGTCCTT</u> **GGCGATAGCAGATTTGCTGGTTGGATTGTTTGTGATGCCGA**
TTGCCCTCTTGACAATCATGTTTGAGGCTATATGGCCCCTCCCACTGGCCCTGTGTCCTG
CCTGGTTATTCCTCGATGTTCTCTTTTCAACTGCCTCCATCATGCATCTCTGTGCCATTT
CCCTGGACCGCTATATAGCCATCAAAAAGCCAATTCAGGCCAATCAGTGCAACACCCGGG
CTACTGCATTCATCAAGATTACAGTGGTATGGTTAATTTCAATAGGCATCGCCATCCCAG
TCCCTATTAAAGGAATCGAGACTGATGTGATTAATCCACACAATGTCACCTGTGAGCTGA
CAAAGGACCGCTTTGGCAGTTTTATGGTCTTTGGGTCACTGGCTGCTTTCTTCGTACCTC
TCACCATCATGGTAGTCACTTACTTTCTCACCATTCACACTTTACAGAAGAAAGCTTACT
TGGTCAAAAATAAGCCACCTCAACGCCTAACACGGTGGACTGTGCCCACAGTTTTCCTAA
GGGAAGACTCATCCTTTTCATCACCAGAAAAGGTGGCAATGCTGGATGGGTCTCACAGGG
ATAAAATTCTACCTAACTCAAGTGATGAGACACTTATGCGAAGAATGTCCTCAGTTGGAA
AAAGATCAGCCCAAACCATTTCTAATGAGCAGAGAGCCTCGAAGGCCCTTGGAGTCGTGT
TTTTCCTTTTTCTGCTTATGTGGTGCCCCTTTTTTATTACAAATCTAACTTTAGCTCTGT
GTGATTCCTGCAATCAGACCACTCTCAAAACACTCCTGGAGATATTTGTGTGGATAGGCT
ACGTTTCCTCGGGGGTGAATCCTCTGATCTATACACTCTTCAATAAGACATTTCGGGAAG
CATTTGGCAGGTACATCACCTGCAATTACCGAGCCACAAAGTCAGTAAAAGCACTTAGGA
AGTTTTCCAGTACACTTTGTTTTGGGAATTCAATGGTAGAAAACTCTAAATTTTTCACAA
AACATGGAATTCGAAATGGGATCAACCCTGCCATGTACCAGAGCCCAATGAGGCTCCGAT
GTTCAACCATTCAGTCCTCATCAATCATCCTCCTCGATACCCTTCTCACTGAAAACGATG
GCGACAAAGCGGAAGAGCAGGTCAGCTACATATTGCAGGAACGGGCCGGCCTCATCTTGA
GAGAGGGTGATGAGCAGGACGCACGCGCACCATGGCAGGTTCAAGAGTGA
(SEQ ID NO:1)

FIGURE 2A
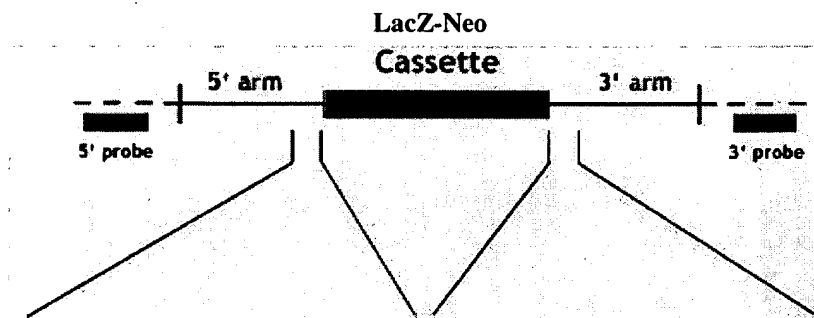
| Gene Sequence Structure * | 130 bp | Sequence Deleted | 319 bp |

Size of full-length
cDNA: 1550 bp

Targeting Vector*
(genomic sequence)

LacZ-Neo

Construct Number: 2520

Cassette

5' arm

3' arm

5' probe

3' probe

Arm Length:
5': 1.6 kb
3': 5 kb

————— Targeting Vector
– – – – Endogenous Locus

*·Not drawn to scale

5'>TGAGTGTCTGGTGGGTTTGCT
AAATGCTTTGCTAAAGCAGATGAC
TTGCTTAGCTACTGACCATGCTGA
CCACTGTCTGGAACTGGACTGAGT
CACCAAAAGGCGAATGGCTTCATC
TTATAAAATGTCTGAACAAAGCAC
AACTTCTGAGCACATTTTACAGAA
GACATGTGATCACCTGATCCTGAC
TAACCGTTCTG<3'
(SEQ ID NO:3)

5'>GGCGATAGCAGATTTGCTGGT
TGGATTGTTTGTGATGCCGATTGC
CCTCTTGACAATCATGTTTGGTGA
GTATTTCCCCTTGTTCCTGCCACT
GAACACTACTAACGTAGTGAAATG
GACACTCACTGACCTTTATTTTGT
TTGAAATAAAAGAAGGACCTGGAT
TAAAAACACAGAAGGGAACATTCC
TTCATTTTTCA<3'
(SEQ ID NO:4)

FIGURE 2B